UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,157	12/23/2003	Shinichi Momonami	1247-0526P	7755

2292 7590 08/10/2007
BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER	
MIRZADEGAN, SAEED S	
ART UNIT	**PAPER NUMBER**
2144	

NOTIFICATION DATE	DELIVERY MODE
08/10/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/743,157	MOMONAMI, SHINICHI	
	Examiner	Art Unit	
	Saeed S. Mirzadegan	2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 December 2003* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/23/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed.

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a) because Fig. 4, fails to show determination of whether the information from host terminal 2 arrived from the internet 4, or PSTN 3 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If

a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The abstract of the disclosure is objected to because line 9 recites "of the user terminal" where it should read "to the user terminal" also line 10-12 recites "sends setting information for enabling communication between the user terminal and the host terminal via the Internet, to the user terminal via the PSTN" which is confusing. It should read "host terminal sends configuration information via the PSTN to the remote terminal that enables the remote terminal to establish communication over the Internet with the host terminal." Correction is required. See MPEP § 608.01(b).

4. The disclosure is objected to because of the following informalities: Page 5, lines 17-20 recite "sends setting information for enabling communication between the user terminal and the host terminal via the second transmission line, to the user terminal via the first transmission line" is incoherent. It should read "sends configuration information

to the user terminal via the 1st transmission line for enabling communication over the 2nd transmission between user the user terminal and the host terminal."

The disclosure is objected to for the above instance as well as many similar occurrences.

Appropriate correction is required.

5. The disclosure is objected to because of the following informalities: Page 20, lines 14-18 recite "The resetting monitoring portion 11a monitors setting information such as an IP (Internet protocol) address that is sent from the host terminal 2, and gives the host terminal 2 permission of a setting for connecting to the user terminal 1 when communication via the Internet 4 is impossible." is incoherent. The passage recites that it is the host terminal 2 that is sending the information; it also recites that it give host terminal 2 the permission.

Appropriate correction is required.

6. The disclosure is objected to because of the following informalities: page 21 line 23 recites "to the PSTN 3 and to the PSTM 3."

Appropriate correction is required.

7. The disclosure is objected to because of the following informalities: page 21 line 25 and page 26 lines 1 & 2 recite "a modem that is a signal conversion apparatus for

executing data communication with the host terminal 2 via the network interface 6". It is not clear that how the modem is connected to the network interface.

The same exact objection is raised with Page 24 lines 9-12.

Appropriate correction is required.

8. The disclosure is objected to because of the following informalities: Page 26, line 12 recites "via the internet 4." This is inaccurate and does not correspond to Fig. 3.

Appropriate correction is required.

9. The disclosure is objected to because of the following informalities: Page 28, lines 1-5 recite "at step S42, in a case where the user terminal 1 and the host terminal 2 are already in a state of being communicable via the Internet 4, the user terminal 1 forbids a setting for reconnecting the user terminal and the host terminal via the Internet 4, and the process proceeds to step S43" is not proper. It should read "at step S42, when the user terminal 1 and the host terminal 2 have Internet 4 connectivity, the user terminal 1 ignores host terminal 2's configuration information transmission for reestablishing Internet 4 connectivity between user terminal 1 and host terminal 2.

Appropriate correction is required.

Claim Objections

10. Claim 1 is objected to because of the following informalities: Page 38, line 25 and page 39, lines 1-3 recite "information for enabling communication between the user

terminal and the host terminal via the second transmission line, to the user terminal via the first transmission line" which lacks clarity. As recited, the information is being sent to both the first and the second transmission lines.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The recited limitation in line 13-14 "a network interface for connecting the plurality of user terminals and the user-side local area network" is incorrect, since more than one network interface card is needed to connect the plurality of user terminals and the user-side local area network.

13. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The recited limitation in line 13-15 "setting information sent from the host terminal, allows a setting for connecting the user terminal and the host terminal via the second transmission line when communication between the user terminal and the host terminal via the second transmission line is not possible, and forbids a setting for reconnecting" which is contradictory.

14. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The recited limitation in line 5-8 "sends the specified maintenance information via a transmission line that is in a communicable state of the first and second transmission lines to the host terminal" is unclear.

15. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

17. **Claims 1-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yashimura et al. (US PG. Pub. No. 2003/0217178) hereafter "Yashimura", in view of Kim et al. (US Pat. No. 6473788), hereafter "Kim", and further in view of Dove et al. (US Pat. No. 6175865) hereafter "Dove":

18. Regarding **Claim 1**, Yashimura discloses a remote maintenance system comprising: a plurality of user terminals **(¶0144, Fig. 21) receiving apparatuses 2a-2c,** that are connected to at least a plurality of transmission lines **(Fig. 21) transmission lines 4 & 5,** of different communication methods **(¶0023 & ¶0024) fist and second communication method which are different and have different communication protocols**; a host terminal that is connected to the plurality of transmission lines **(Fig. 21) sending apparatus**; a user-side local area network that is connected to a specified transmission line of the plurality of transmission lines so as to connect the plurality of user terminals **(Fig. 21) network 4, connecting 2a, 2b, 2c)**; and a network interface for connecting the plurality of user terminals and the user-side local area network **(Fig. 3, 206) Network Interface for connecting to network 4**, wherein when the user terminal **(Fig 21) 2a-2c**, connected to a predetermined first transmission line of the plurality of transmission lines **(Fig. 21) 4 & 5**, sends a specified contract signal **(¶0023) sending data,** to the host terminal via the first transmission line **(Fig 21) 4**: the host terminal selects a predetermined second transmission line from among the plurality of transmission lines as a transmission line **(¶0114) the receiving apparatus selects the transmission path from plurality of available paths**, and sends setting information

for enabling communication between the user terminal and the host terminal via the second transmission line **(¶0115) receiving apparatus may report to sending apparatus a destination path instead of a specific transfer path**, to the user terminal via the first transmission line **(¶0015) internet**; and the user terminal receives the setting information sent from the host terminal, and makes a setting so as to enable communication-between the user terminal and the host terminal via the second transmission line on the basis of the received setting information **(¶0027 and ¶0028) sending information about an alternate communication method to the other device by the second communication method to enable communication via the first communication method.** However Yashimura does not teach: manage specified maintenance information of the user terminals that are under specified contracts; a connection completion signal that represents the completion of connection between the user-side local area network and the network interface to the host terminal via the first transmission line; sending data that includes the specified maintenance information.

19. In the same field of endeavor, Kim teaches, **(Col. 1, line 9-12) maintenance and servicing of a remote peripheral device (terminal)**; Kim further teaches **(Col. 1, lines 66-67 & Col. 2, lines 1-2 & 15-18) sending instructions to the node for servicing and maintenance.**

20. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Kim's teachings of maintenance

and servicing of a remote peripheral device and sending service and maintenance instructions with the teachings of Yashimura, for the purpose of **(see Kim, Col. 1, lines 27-31) reducing the number of site visits required to be made by service technicians.** Yashimura provides motivation to do so, by utilizing an alternate transmission method and steps to improve the reception of data being transferred to a receiving apparatus even if an error occurs in the data transfer **(see Yashimura, Page 1, ¶0005 & ¶0012)**.

21. In the same field of endeavor, Dove teaches, **(Col. 5, lines 62-67 & Col. 6, lines 1-4 & 18-21) a signal that represents a connection establishment between a node and a network.**

22. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Dove's teachings of a signal that represents a establishment of a connection between a node and a network with the teachings of Yashimura, for the purpose of **(see Dove, Col. 1, lines 7-10 & Col. 3, lines 5-7) automating the configuration of the media connections in a local area network.** Yashimura provides motivation to do so, by utilizing an alternate transmission method and steps to improve the reception of data being transferred to a receiving apparatus even if an error occurs in the data transfer **(see Yashimura, Page 1, ¶0005 & ¶0012)**.

23. Regarding **Claim 2**, Yashimura & Kim and Dove as applied to claim 1 above disclose the invention as claimed. Yashimura further discloses: the user terminal includes resetting monitoring means **(Fig. 3, 201) controller,** that monitors the setting information sent from the host terminal **(¶0056, lines 1-3) performs an entire control of receiving apparatus 2**, allows a setting for connecting the user terminal and the host terminal via the second transmission line when communication between the user terminal and the host terminal via the second transmission line is not possible, and forbids a setting for reconnecting the user terminal and the host terminal via the second transmission line when the user terminal and the host terminal are already connected via the second transmission line and communication is possible **(¶0027 & ¶0028)**.

24. Regarding **Claim 3**, Yashimura & Kim and Dove as applied to claim 1 above disclose the invention as claimed. Yashimura further discloses: the user terminal further includes user terminal diagnosing means **(¶0056, lines 1-3) performs an entire control of receiving apparatus 2,** that diagnoses whether the network interface is available or unavailable **(¶0070 & ¶0071) by monitoring the transmission results, it is determined whether the communications via the NIC is available or unavailable**; and when the user terminal diagnosing means diagnoses that the network interface is unavailable, information that the network interface is unavailable is sent to the host terminal via the first transmission line **(¶0070 & ¶0071) when the transmission results indicates that transmission via the NIC is unavailable, the information is sent via the alternate transmission method**.

25. Regarding **Claim 4**, Yashimura & Kim and Dove as applied to claim 3 above disclose the invention as claimed. Yashimura further teaches: the user terminal diagnosing means diagnoses whether the user-side local area network has an abnormality **(¶0070 & ¶0071) by monitoring the transmission results, it is determined whether the communications via the NIC is available or unavailable**, and when the user terminal diagnosing means diagnoses that the user-side local area network has an abnormality, information that the user-side local area network has an abnormality is sent to the host terminal via the first transmission line **(¶0070 & ¶0071) when the transmission results indicates that transmission via the NIC is unavailable, the information is sent via the alternate transmission method**. However Yashimura and Dove do not explicitly teach the user terminal is connected to the second transmission line via the user-side local area network.

26. In the same field of endeavor, Kim teaches, **(Fig. 1, 15) user terminal 11 is connected to the transmission line via the user-side local area network.**

27. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Kim's teachings of connecting the user terminal to the transmission line via the user-side local area network, with the teachings of Yashimura and Dove, for the purpose of **(see Kim, Col. 1, lines 27-31) reducing the number of site visits required to be made by service technicians.**

Yashimura provides motivation to do so, by utilizing an alternate transmission method and steps to improve the reception of data being transferred to a receiving apparatus even if an error occurs in the data transfer **(see Yashimura, Page 1, ¶0005 & ¶0012)**.

28. Regarding **Claim 5**, Yashimura & Kim and Dove as applied to claim 3 above disclose the invention as claimed. Yashimura further teaches: the host terminal includes host terminal diagnosing means **(Fig.1, 101) controller**, that diagnoses trouble of the user terminal and diagnoses whether communication between the user terminal and the host terminal via the second transmission line is impossible **(¶0054, lines 1-4)**; and when the host terminal diagnosing means diagnoses that communication between the user terminal and the host terminal via the second transmission line is impossible **(¶0110, line 3)**, the host terminal sends information that communication between the user terminal and the host terminal via the second transmission line is impossible, to the user terminal via the first transmission line **(¶0112) when an error occurs preventing transmission via the second transmission line, the user terminal transmits via the first transmission line**, and the user terminal receives the information sent from the host terminal **(¶0112)**, and causes the user terminal diagnosing means to diagnose whether the network interface is unavailable and whether the user-side local area network has an abnormality **(¶0070 & ¶0071) by monitoring the transmission results, it is determined whether the communications via the NIC is available or unavailable**.

29. Regarding **Claim 6**, Yashimura & Kim and Dove as applied to claim 1 above disclose the invention as claimed. Yashimura further discloses: when receiving at least one of the information that the network interface is unavailable and the information that the user-side local area network has an abnormality which are sent from the user terminal via the first transmission line **(¶0102, lines 1-4)**, the host terminal sends setting information for enabling communication between the user terminal and the host terminal via the second transmission line, to the user terminal via the first transmission line **(¶0102)**.

30. Regarding **Claim 7**, Yashimura & Kim and Dove as applied to claim 1 above disclose the invention as claimed. Yashimura further discloses: the user terminal sends the information via a transmission line that is in a communicable state of the first and second transmission lines to the host terminal **(¶0114, lines 1-4).** However Yashimura & Dove do not teach: the host terminal further includes data registering means that renews and registers the specified maintenance information of the user terminal that is under the specified contract, and the host terminal receives the maintenance information and then registers the maintenance information into the data registering means; specified maintenance information

31. In the same field of endeavor, Kim teaches, **(Fig. 6, 109) Data storage on servicing device (host) where the transmitted information is stored.** Kim further

teaches, **(Col. 1, lines 66-67 & Col. 2, lines 1-2 & 15-18) sending instructions to the node for servicing and maintenance.**

32. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Kim's teachings of data storage in the host terminal which stores the maintenance information as well as sending service and maintenance information to the node with the teachings of Yashimura and Dove, for the purpose of **(see Kim, Col. 1, lines 27-31) reducing the number of site visits required to be made by service technicians.** Yashimura provides motivation to do so, by utilizing an alternate transmission method and steps to improve the reception of data being transferred to a receiving apparatus even if an error occurs in the data transfer **(see Yashimura, Page 1, ¶0005 & ¶0012)**.

33. Regarding **Claim 8**, Yashimura & Kim and Dove as applied to claim 1 above disclose the invention as claimed. Yashimura further discloses: plurality of transmission lines so as to connect the host terminal as well as second transmission line **(Fig. 21, 4 & 5)**. However Yashimura and Dove do not teach: a host-side local area network that is connected to a specified transmission line & the host terminal is connected to the transmission line via the host-side local are network,

34. In the same field of endeavor, Kim teaches, **(Fig. 1, LAN 19) host-side local area network which connects the host terminal to the network via the transmission line.**

35. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Kim's teachings of a plurality of transmission lines that connect the host terminal, one of them being designated the second transmission line with the teachings of Yashimura and Dove, for the purpose of **(see Kim, Col. 1, lines 27-31) reducing the number of site visits required to be made by service technicians.** Yashimura provides motivation to do so, by utilizing an alternate transmission method and steps to improve the reception of data being transferred to a receiving apparatus even if an error occurs in the data transfer **(see Yashimura, Page 1, ¶0005 & ¶0012)**.

36. Regarding **Claim 9**, Yashimura & Kim and Dove as applied to claim 1 above disclose the invention as claimed. Yashimura further discloses the first transmission line is constituted by a public switched telephone network **(Fig. 26, 5) telephone line**.

37. Regarding **Claim 10**, Yashimura & Kim and Dove as applied to claim 1 above disclose the invention as claimed. Yashimura further discloses: the second transmission line is constituted by a line network that is capable of high-speed transmission of a large amount of data **(Fig. 26, 4) High-speed network**.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form PTO-892 (Notice of Reference Cited) for a list of relevant prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saeed S. Mirzadegan whose telephone number is 571-270-3044. The examiner can normally be reached on M-F 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SSM

WILLIAM VAUGHN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100